

AMENDMENTS TO THE CLAIMS

Please amend claims 22-29 and 31-34, cancel claims 35-39, and add new claims 42-45. No new matter is believed to be introduced by the aforementioned amendment. The following listing of claims will replace all prior versions and listings of claims in the application.

1. **(Previously presented)** A system for monitoring the power output of a light source, comprising:

a light source for providing a light beam;

an optical lens positioned in the light beam, the optical lens having an input surface generally facing the light source and an output surface generally facing away from the light source, the optical lens further having a reflective surface that covers less than half of the surface area of the input surface of the lens; and

a photo detector generally facing the input surface of the lens, wherein the reflective surface of the lens is adapted to reflect at least a portion of the light beam toward the photo detector.

2. **(Original)** The system of claim 1 further comprising:

a controller coupled to the photo detector and the light source, the controller receiving a signal from the photo detector that is indicative of the amount of light detected by the photo detector, the controller being adapted to provide a control signal to the light source that adjusts the power of the light source so that the signal from the photo detector is relatively constant.

3. **(Original)** The system of claim 1 wherein the reflective surface is provided on the input surface of the lens.

4. **(Original)** The system of claim 3 wherein the reflective surface is a concave surface on the input surface of the lens.

5. **(Previously presented)** A system for monitoring the power output of a light source, comprising:

a light source for providing a light beam;

and an optical lens positioned in the light beam, the optical lens having a generally convex input surface generally facing the light source and an output surface generally facing away from the light source, the optical lens further including a concave reflective surface on a portion of the generally convex input surface that covers less than half of the surface area of the input surface of the lens; and

a photo detector generally facing the input surface of the lens, wherein the reflective surface of the lens is adapted to reflect at least a portion of the light beam toward the photo detector.

6. **(Original)** The system of claim 5 wherein the optical lens is an aspheric lens with the concave reflective surface molded therein.

7. **(Original)** The system of claim 3 wherein the light beam illuminates an illumination pattern on the input surface of the optical lens, wherein the illumination pattern has a central axis and an outer perimeter, the reflective surface extending from at or near the center axis of the illumination pattern to at or near the outer perimeter of the illumination pattern.

8. **(Original)** The system of claim 1 wherein the reflective surface is adapted to focus at least part of the reflected light onto the photo detector.

9. **(Original)** The system of claim 1 wherein the reflective surface has a rectangular shaped perimeter.

10. **(Original)** The system of claim 1 wherein the reflective surface has a circular shaped perimeter.

11. **(Original)** The system of claim 1 wherein the reflective surface has an oval shaped perimeter.

12. **(Original)** The system of claim 1 wherein the reflective surface has an annular shaped perimeter surrounding an at least partially transmissive surface of the lens.

13. **(Original)** The system of claim 1 wherein the reflective surface includes a coating of a reflective material.

14. **(Original)** The system of claim 13 wherein the coating includes a noble metal.

15. **(Original)** The system of claim 1 wherein the light source and photo detector are positioned adjacent to one another, and the optical lens is spaced from both the light source and photo detector.

16. **(Original)** The system of claim 15 further comprising an optical fiber, wherein the optical lens is adapted to couple at least part of the light beam from the light source into the optical fiber.

17. **(Original)** The system of claim 1 wherein the reflective surface reflects less than 25% of the power in the light beam that is provided by the light source.

18. **(Original)** The system of claim 1 wherein the light source includes a vertical cavity surface emitting laser (VCSEL).

19. **(Original)** The system of claim 1 wherein the light source includes a Light Emitting Diode (LED).

20. **(Original)** The system of claim 1 wherein the photo detector includes a photodiode.

21. **(Original)** The system of claim 1 wherein the light source has a numerical aperture that is dependent upon one or more operating conditions, the reflective surface being configured to reflect a relatively constant percent of the power of the light beam provided by the light source over a range of numerical apertures of the light beam.

22. **(Currently amended)** A lens comprising:
 an input surface comprising:
 [[a]] an input transmissive part for passing a portion of an incident light beam; and
 [[a]] an input reflective part for reflecting a portion of the incident light beam to a first external device before passage of the light beam through the lens, the input reflective part being substantially non-transmissive; and
 an output surface comprising:
 an output transmissive part for passing a portion of a refracted light beam; and
 an output reflective part for reflecting a portion of the refracted light beam to a second external device after passage of the refracted light beam through the lens, the output reflective part being substantially non-transmissive.
23. **(Currently amended)** The lens of claim 22 wherein ~~the lens includes a first lens surface and an opposing second lens surface;~~ the input reflective part ~~covering~~ covers less than half of the surface area of the ~~first lens~~ input surface.
24. **(Currently amended)** The lens of claim 23 wherein the input reflective part ~~covering~~ covers less than 25% of the surface area of the ~~first lens~~ input surface.
25. **(Currently amended)** The lens of claim 23 wherein the input reflective part reflects less than 25% of the power of the light that is incident on the ~~first lens~~ input surface.
26. **(Currently amended)** The lens of claim 22 wherein the input reflective part is integral with the lens.
27. **(Currently amended)** The lens of claim 22 wherein the input reflective part is concave, and the input transmissive part is convex.
28. **(Currently amended)** The lens of claim 22 wherein the ~~lens has~~ input surface is an aspheric surface and the input reflective part is molded into the ~~aspheric lens~~ input surface.

29. **(Currently amended)** The lens of claim 22 wherein one of the input and output reflective surface parts is coated with a reflective metal.

30. **(Original)** The lens of claim 29 wherein the reflective metal is a noble metal.

31. **(Currently amended)** The lens of claim 22 wherein the input reflective part ~~is an~~ has a substantially annular shape.

32. **(Currently amended)** The lens of claim 22 wherein the input reflective part ~~is a~~ has a substantially circular shape.

33. **(Currently amended)** The lens of claim 22 wherein the input reflective part ~~is an~~ has a substantially oval shape.

34. **(Currently amended)** The lens of claim 22 wherein ~~said~~ the input reflective part has a substantially polygon shape.

35-39. **(Canceled)**

40. **(Previously presented)** A system for monitoring the power output of a light source, comprising:

a light source that provides a light beam;

a photo detector; and

a lens positioned to receive the light beam, the lens including a reflective portion that reflects a portion of the light beam away from the lens, wherein the reflected portion of the light beam does not pass through the lens.

41. **(Previously Presented)** The system for monitoring as defined in claim 40, wherein the lens further includes an input surface and an output surface, and wherein the reflective portion is included on the input surface of the lens.

42. **(New)** The system for monitoring as defined in claim 41, wherein the reflective portion is configure to reflect the light beam toward the photo detector.

43. **(New)** The system for monitoring as defined in claim 42, further comprising a second photo detector.

44. **(New)** The system for monitoring as defined in claim 43, wherein the lens further includes a second reflective portion configured to reflect a portion of the light beam toward the second photo detector.

45. **(New)** The system for monitoring as defined in claim 44, wherein the second reflective portion is included on the output surface of the lens.